

## CHAPTER 61. INSPECT FAR PART 125 OPERATOR'S MAINTENANCE RECORDS

### SECTION 1. BACKGROUND

#### 1. PROGRAM TRACKING AND REPORTING SUBSYSTEM (PTRS) ACTIVITY CODES.

##### A. Maintenance:

- Record Surveillance: 3634
- Airworthiness Directive (AD) Compliance Verification: 3649

##### B. Avionics:

- Record Surveillance: 5634
- AD Compliance Verification: 5649

**3. OBJECTIVE.** This chapter provides guidance for inspecting an operator's airplane maintenance records under Federal Aviation Regulations (FAR) Part 125.

#### 5. GENERAL.

A. Airplane maintenance records include any records that document the performance of work on an airplane. An airplane maintenance records must be inspected periodically to ensure that they meet the requirements of the operator's approved recordkeeping system.

B. *Surveillance Criteria.* While inspecting an operator's airplane maintenance records, principal inspectors must determine if all the work was based on instructions, procedures, or information that has been previously approved or accepted by the Federal Aviation Administration (FAA). Such data could be in the form of:

- Manufacturer's manuals
- Service bulletins
- Service letters
- Data included in the operator's approved airplane inspection program
- AD's
- Other accepted documents

##### C. *Personnel Identification Recording Requirements.*

Since FAR Part 125 operators do not have the authorization to approve an airplane for return to service, the name(s), address(es), and certificate number(s) of the person(s) performing the work and the person(s) approving the work must be recorded. These personnel must be listed in the operator's manual.

#### 7. RECORD REQUIREMENTS.

A. *Retaining Airworthiness Releases.* Records for each airworthiness release must be retained for at least 60 days.

##### B. *Total Time-In-Service Records.*

(1) The total time-in-service record is a record starting from the date of manufacture and continuing through the life of the airplane.

(2) When a rebuilt engine is certified to zero time, the total time-in-service becomes zero (reference FAR Section 91.421). Do not confuse this with zero time since overhaul as this is referring to the current overhaul status and does not affect total time-in-service.

**NOTE: Only the manufacturer or the manufacturer's representative can zero time an engine.**

C. *Life-Limited Parts.* Operators must have a current record of the status of life-limited parts. This record shows the present accumulated time-in-service of each life-limited part.

D. *Records of Overhaul.* An operator must maintain overhaul records of any item required to be overhauled by the operator's inspection program. These records must be maintained until the work is superseded or repeated by work of equivalent scope and detail, or for 1 year after the work is performed.

E. *Inspection Status.* Inspection status defines the work that has been, and is scheduled to be performed according to the inspection program. The inspection status records should show the following:

- The time since the most recent inspection expressed in terms of hours, cycles, or calendar time
- The scheduled time and type of next inspection

*F. AD.* The operator must maintain the current status of all one-time/recurring AD's applicable to the operator's equipment. In addition to specific instructions provided in the AD, typical sources of procedures for compliance with AD's include:

- Service bulletins
- Service letters
- Approved operator/manufacturer's engineering orders or authorizations

**NOTE: Only data specifically approved for AD accomplishment by the appropriate Aircraft Certification Office is authorized.**

(1) The surveillance of AD's should be included in all work programs. AD verification can be accomplished by the following methods:

(a) Actual surveillance of the AD being accomplished. This would also include a review of all paper work such as Engineering Authorizations, Engineering Orders, workcards, maintenance manual references and service bulletins to ensure that the AD is properly complied with.

(b) Physical verification of previous AD accomplishment

(2) The Program Tracking Reporting Subsystem (PTRS) comment code should relate to the Air Transport Association of America's (ATA) aircraft codes (ATA's 100 codes) of the AD's being inspected. Comments should contain the numbers of each AD

verified, the type of AD verified, and the complete inspection results.

*G. Major Repair and Major Alteration Records.* Applicants are required to retain the records of each major repair/alteration to an airplane, to include the following information:

*(1) Major repair records:*

- A description of the work performed with approved data
- The date of completion of the work performed
- The signature, type of certificate, and certificate number of the person approving the airplane for return to service

*(2) Major alteration records:*

- A description of the work performed with approved data
- The date of completion of the work performed
- The signature, type of certificate, and the certificate number of the person approving the airplane for return to service

**9. REPAIR STATION RECORDS OF WORK PERFORMED ON OPERATOR'S AIRPLANE.** Since repair stations only have to retain records of work performed for 2 years, some operators have reported that maintenance records are not always available from repair stations beyond the 2 year retention period. Since the operator is always responsible for obtaining and retaining the records required by the Administrator, operators should be advised to require a copy of the work documentation from the repair station at the time that the work is performed.

## SECTION 2. PROCEDURES

### 1. PREREQUISITES AND COORDINATION REQUIREMENTS.

#### A. Prerequisites:

- Knowledge of the regulatory requirements of FAR Part 125
- Successful completion of Airworthiness Inspector's Indoctrination Course for General Aviation and Air Carrier Inspections, or previous equivalent
- Familiarity with the type of operation being inspected

#### B. Coordination.

(1) This task requires coordination between the principal inspectors and with AFS-620, Regulatory Support Division, Operational System Branch, as applicable.

(2) If this task is performed by the office with geographic responsibility, coordinate with Certificate Holding District Office (CHDO) principal inspectors.

### 3. REFERENCES, FORMS, AND JOB AIDS.

#### A. References:

- FAR Parts 39, 43, 65, 91 and 145

#### B. Forms. None.

#### C. Job Aids. None.

### 5. PROCEDURES.

#### A. Review the Office File.

B. *Inspect the Maintenance Records.* Ensure that the operator has retained the required maintenance/alteration/inspection records for each airplane, including airframe, engine, propeller, and appliances. These records must include the following:

(1) A description of the work performed (data acceptable to the Administrator), including the date of completion

(2) The name or other positive identification of the person approving the work

C. *Inspect the Operator's Record System.* Inspect the records to ensure that manual procedures are being followed. During the inspection, document

and photocopy any problem areas, obvious omissions or apparent discrepancies. The records checked should include the following:

#### (1) Airworthiness releases.

(a) Ensure that the operator retains the airworthiness release records for at least 60 days.

(b) Ensure that the airworthiness release signature is authorized by the operator, per FAR Part 43.

(c) Review the signer's training record to ensure that the person is trained to the level identified in the operator's manual.

(2) *Flight/Maintenance logs.* Obtain and review the flight/maintenance logs to determine the effectiveness of the airworthiness release procedures following scheduled inspections and non-routine maintenance. Review the records to ensure the following:

(a) Flight discrepancies are entered after each flight

(b) Corrective actions are related to the discrepancy

(c) Corrective actions and sign-offs are entered in the maintenance record per manual procedures

(d) Repetitive discrepancies are handled according to the manual

(e) Deferred maintenance as authorized by the Minimum Equipment List (MEL) is deferred per the operator's MEL and manual instructions

(f) Required Inspection Item (RII) items are signed off per the manual instructions and that the inspector was authorized by the operator to perform the inspection

(3) *Scheduled inspections.* Select or obtain work packages for scheduled inspections and ensure the following:

(a) Scheduled inspections are properly signed off

(b) Generated non-routine items are properly signed off

(c) RII items are properly identified and signed off by properly authorized, qualified, certificated, and trained personnel

(d) Repairs are categorized correctly (major or minor)

(e) Approved data is being used

(4) *Total time-in-service records.* Compare the manual procedures with the actual accomplishment of the total time/cycle-in-service records for the airframe, engine, propeller and rotor.

(a) Select and obtain a total time/cycle-in-service record for a sample number of airplanes to ensure that cumulative flight times/cycles are added to the record.

(b) Make a spot check of the cumulative total time/cycle in-service against the flight logs to ensure that daily entries correspond to the flight log.

(c) If the operator maintains a handwritten maintenance record for engines, compare the record entries to the airplane flight log entries for the following:

- Overall accuracy
- The possible transposition of flight time/cycle-in-service, numbers, etc.

(5) *Life-limited parts records.* Compare the manual procedures for life-limited parts with the actual recording of the current status of life-limited parts. Select a random sample of records and ensure the following:

(a) All life-limited parts described on type certificate data sheets or in a manual referenced on the type certificate data sheets are noted

(b) The current status of each part is provided, to include:

- Total operating hours/cycles accumulated
- Life-limit (total service life)
- Remaining time/cycles
- Modifications

(c) The time/cycle limits on the operator's list are the same as those on the type certificate data sheets

(d) Life-limits have not been exceeded. Select a sample of life-limited items that have been installed within the last 12 months and review the records to ensure that life-limited time was carried forward from the previous service record.

(e) If overhauled, the overhaul record is available

(f) The life-limit of an item has not been changed as a result of the overhaul

(6) *Overhaul records.* Compare the manual procedures for maintaining the overhaul record with the actual overhaul record content.

(a) Select a random sample of overhauled items to ensure the following:

- Overhaul records are available for those items selected
- The records contain a description of the overhaul
- The records show the time since last overhaul
- The item was overhauled per the overhaul specifications by a qualified and authorized person
- The component was approved for return to service by an authorized person

(b) Review the removal/installation records of overhauled components to determine if the overhaul was accomplished within the authorized time limits. Current regulations require that these records be maintained for 1 year or until the work is superseded by work of equal scope and detail.

(7) *Inspection status records.*

(a) Compare the manual procedures for maintaining the current airplane inspection status with available records to ensure that daily flight hours/cycles are used to obtain the current inspection status.

(b) Take a random sample of airplane inspection records to ensure that scheduled inspections times/cycles were not exceeded (overflowed).

(8) *One-time/recurring AD's.* Request a random sample of airplane AD compliance records to ensure the following:

(a) The records contain all applicable AD's for the sampled airplane

(b) AD requirements were accomplished within the effective times of the AD

**NOTE: Special emphasis should be put on checking recurring AD's.**

(c) The AD record contains current status and method of compliance. The current status must include the following:

- A list of all AD's applicable to the airplane
- The date and time of compliance
- The time and/or date of next required action (if recurring AD)

(d) The record is being retained indefinitely

**NOTE: If any AD's have an alternative method of compliance, ensure that the operator has obtained prior approval for that alternative method.**

(e) The method of compliance is the same as specified in the AD

(f) The date of compliance is identical to the date in the current status list

(g) The mechanic/inspector was trained properly and authorized to accomplish the work

(h) The accomplishment was signed off properly

(9) *Major alteration and major repair records.*

(a) Compare the manual procedures for maintaining the major alteration and major repair records with the actual work records to ensure consistency with the approved procedures.

(b) Select and obtain a random sample of major repair and alteration work records to ensure the following:

- The records contain the date of accomplishment and a brief description of the work
- The records show that the work was accomplished according to approved data

*D. Analyze the Findings.* Evaluate all deficiencies to determine if corrective actions will be required.

## 7. TASK OUTCOMES.

*A. File PTRS Data Sheet.* PTRS comments should include the ATA numbers of each AD verified, the type of AD verified, and the complete inspection results.

*B. Completion of this task may result in the following:*

- If the inspection was performed by the office having geographic responsibility, a report of any deficiencies submitted to the CHDO
- A letter from the CHDO informing the operator of the results of the inspection
- Enforcement Investigation Report, as applicable

*C. Document the Task.* File all supporting paperwork in the operator's office file.

**9. FUTURE ACTIVITIES.** Normal surveillance.

